

**TRI Total Releases, Manufacturing Industries (Original) (1995 and 1998-99)**

	1995	1998	1999	Change 1998-1999		Change 1995-1999	
	Pounds	Pounds	Pounds	Pounds	Percent	Pounds	Percent
<b>On-site Releases</b>							
Total Air Emissions	1,590,651,239	1,270,193,503	1,175,054,932	-95,138,571	-7.5	-415,596,307	-26.1
Fugitive Air Emissions	394,285,344	294,971,535	270,765,473	-24,206,062	-8.2	-123,519,871	-31.3
Point Source Air Emissions	1,196,365,895	975,221,968	904,289,459	-70,932,509	-7.3	-292,076,436	-24.4
Surface Water Discharges	191,919,759	238,483,036	253,591,816	15,108,780	6.3	61,672,057	32.1
Underground Injection	248,927,637	209,711,433	199,547,803	-10,163,630	-4.8	-49,379,834	-19.8
On-site Land Releases	284,190,539	343,781,378	323,667,851	-20,113,527	-5.9	39,477,312	13.9
On-site Landfills	83,653,068	113,935,316	98,443,132	-15,492,184	-13.6	14,790,064	17.7
Land Treatment	11,405,847	8,154,812	8,961,222	806,410	9.9	-2,444,625	-21.4
Surface Impoundments	64,947,221	81,151,225	73,771,878	-7,379,347	-9.1	8,824,657	13.6
Other Disposal	124,184,403	140,540,025	142,491,619	1,951,594	1.4	18,307,216	14.7
<b>Total On-site Releases</b>	<b>2,315,689,174</b>	<b>2,062,169,350</b>	<b>1,951,862,402</b>	<b>-110,306,948</b>	<b>-5.3</b>	<b>-363,826,772</b>	<b>-15.7</b>
<b>Off-site Releases</b>							
Storage Only <sup>a</sup>	2,398,318	6,052,636	6,286,182	233,546	3.9	3,887,864	162.1
Solidification/Stabilization - <sup>b</sup>	26,801,593	135,956,959	139,566,130	3,609,171	2.7	112,764,537	420.7
Metals and Metal Compounds Only							
Wastewater Treatment (excluding POTWs) - <sup>c</sup>	3,881,107	3,968,149	6,593,482	2,625,333	66.2	2,712,375	69.9
Metals and Metal Compounds Only							
Transfers to POTWs - <sup>d</sup>	2,552,146	3,009,214	3,345,324	336,110	11.2	793,178	31.1
Metals and Metal Compounds Only							
Underground injection	17,505,679	12,103,395	29,462,912	17,359,517	143.4	11,957,233	68.3
Landfills/Surface Impoundments	227,251,506	235,714,865	232,695,527	-3,019,338	-1.3	5,444,021	2.4
Land Treatment	4,505,535	1,396,685	4,239,385	2,842,700	203.5	-266,150	-5.9
Other Land Disposal	12,573,281	15,630,242	15,829,071	198,829	1.3	3,255,790	25.9
Other Off-site Management	15,460,852	10,372,175	16,872,972	6,500,797	62.7	1,412,120	9.1
Transfers to Waste Broker for Disposal	5,993,004	14,087,152	11,146,540	-2,940,612	-20.9	5,153,536	86.0
Unknown <sup>e</sup>	1,807,187	3,677,497	3,594,515	-82,982	-2.3	1,787,328	98.9
<b>Total Off-site Releases</b>	<b>320,730,208</b>	<b>441,968,969</b>	<b>469,632,040</b>	<b>27,663,071</b>	<b>6.3</b>	<b>148,901,832</b>	<b>46.4</b>
<b>(Transfers Off-site to Disposal)</b>							
<b>Total On-site and Off-site Releases</b>	<b>2,636,419,382</b>	<b>2,504,138,319</b>	<b>2,421,494,442</b>	<b>-82,643,877</b>	<b>-3.3</b>	<b>-214,924,940</b>	<b>-8.2</b>

**Note:** On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in the 1996 reporting year.

Due to an EPA data entry error, one chemical reporting revision for 1999 by a facility, the US Army Letterkenny Depot in Chambersburg, PA, was not included in this table. At the time of publication, the facility had notified EPA that it anticipated revising off-site transfers to disposal (other off-site management) for manganese compounds from 5,584,900 pounds to below 500 pounds. Revisions by this facility of two other compounds are included in this table, but not included in the tables in the 1999 TRI Public Data Release report.

<sup>a</sup> Storage only (disposal code M10) indicates that the toxic chemical is sent off-site for storage because there is no known disposal method. Amounts reported as transferred to storage only are included as a form of disposal (off-site release). See Box 1-5.

<sup>b</sup> Beginning in reporting year 1997, transfers to solidification/stabilization of metals and metal compounds (waste treatment code M41) are reported separately from transfers to solidification/stabilization of non-metal TRI chemicals (waste treatment code M40). Because this treatment method prepares a metal for disposal, but does not destroy it such transfers are included as a form of disposal (off-site release). See Box 1-6. Reports under code M40 of metals and metal compounds have been included in solidification/stabilization of metals and metal compounds in this report.

<sup>c</sup> Beginning in reporting year 1997, transfers to wastewater treatment (excluding POTWs) of metals and metal compounds (waste treatment code M61) are reported separately from transfers to wastewater treatment of non-metal TRI chemicals (waste treatment code M60). Because wastewater treatment does not destroy metals, such transfers are included as a form of disposal (off-site release). See Box 1-6. Transfers of metals and metal compounds reported under code M60 have been included in transfers of metals and metal compounds to wastewater treatment.

<sup>d</sup> Reported as discharges to POTWs in Section 6.1 of Form R. EPA considers transfers of metals and metal compounds to POTWs an off-site release because sewage treatment does not destroy the metal content of the waste material.

<sup>e</sup> Unknown (disposal code M99) indicates that a facility is not aware of the type of waste management used for the toxic chemical that is sent off-site. Amounts reported as unknown transfers are treated as a form of disposal (off-site release).

\* "Original" industries include manufacturing industries in SIC codes 20-39 and federal facilities.